

NATURAL COMMUNITY DESCRIPTIONS

Rich Cove Forest

Rich Cove Forest community types are widespread and abundant in the Southern Appalachians. In Rutherford County, this community type is found in the Hickorynut Gorge area and at a few localities in the South Mountains. Rich Coves are one of the most species-diverse community types in eastern North America, especially for the number of tree and herb species that can occur in them. These forests typically have a closed canopy dominated by a diverse mixture of species including sweet birch (*Betula lenta*), yellow buckeye (*Aesculus flava*), basswood (*Tilia heterophylla*), tulip poplar (*Liriodendron tulipifera*), cucumber tree (*Magnolia acuminata*), and black cherry (*Prunus serotina*) among others. In the best examples, the understory in really good examples is not dense and supports species including witch-hazel (*Hamamelis virginiana*), flowering dogwood (*Cornus florida*), and occasionally sourwood (*Oxydendrum arboreum*). The shrub layer is generally sparse with smooth hydrangea (*Hydrangea arborea*) and strawberry bush (*Euonymus americanus*). The herb layer is typically diverse and lush. Characteristic species include black cohosh (*Cimicifuga racemosa*), blue cohosh (*Caulophyllum thalictroides*), Northern horsebalm (*Collinsonia canadense*), wild geranium (*Geranium maculatum*), wild ginger (*Asarum canadense*), foamflower (*Tiarella cordifolia* var. *cordifolia*), bloodroot (*Sanguinaria canadensis*), ginseng (*Panax quinquefolius*), sweet cicely (*Osmorhiza claytonii*), violets (*Viola* spp.), goat's-beard (*Aruncus* sp.), marginal woodfern (*Dryopteris marginalis*), southern lady fern (*Antheridium asplenoides*), silvery spleenwort (*Deparia acrostichoides*), maidenhair fern (*Adiantum pedatum*), stinging nettle (*Urtica dioica*), and frequently many others.

Acidic Cove Forest

This community type is common in the mountainous regions of North Carolina and in sheltered sites at low to moderate elevations outside of the mountains. In Rutherford County it often occurs in narrow rocky gorges, steep ravines, and sheltered valleys and slopes where it is generally moist and humid. These communities occur over more nutrient-poor soils than Rich Cove Forests, primarily due to the presence of relatively acidic soils. This community often grades into Rich Cove Forest or Canada Hemlock Forest downslope, and various oak-hickory forest types upslope. The forest canopy is closed and generally dense with dominant species typically being red maple (*Acer rubrum*), tulip poplar (*Liriodendron tulipifera*), Canada hemlock (*Tsuga canadensis*), and northern red oak (*Quercus rubra*). The understory is fairly open and generally dominated by saplings of canopy species with occasional flowering dogwood (*Cornus florida*), and sourwood (*Oxydendrum arboreum*). The shrub layer is often very dense with great laurel (*Rhododendron maximum*), gorge rhododendron (*R. minus*), and mountain laurel (*Kalmia latifolia*). The herb layer is typically sparse with dense beds of herbs occurring in canopy light gaps or along open stream channels. Characteristic herbs include galax (*Galax urceolata*), Christmas fern (*Polystichum acrostichoides*), Canada violet (*Viola canadensis*), bellwort (*Uvularia* spp.), Indian cucumber-root (*Medeola virginiana*), jack-in-the-pulpit (*Arisaema triphyllum*), false Solomon's seal (*Maianthemum racemosum*), trilliums (*Trillium* spp.), and sedges (*Carex* spp.).